0002/PTO Rcy. 6/95

3					
) }		 -) insido	114.14	hav >	

Approved for use through

12-26-00

PTO/SB/ xx (6-95) OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Department of Commerc
Patent and Trademark Office

NEW UTILITY PATENT APPLICATION TRANSMITTAL

(to be used for new applications only)

Attorney Docket Number	419-01	10
First Named Inventor	Zhurin	S. 7
Total Pages in this Submission	53	7.0 U.

APPLICATION ELEMENTS Notice: Checklist items mentioned under Application Elements section construct a new utility patent application. Please refer to MPEP Sections 506, 601, (37CFR 1.77, 1.53, 35 USC 111, 112, 113) for detailed explanation regarding completeness of an original patent application.			ACCOMPANYING APPLICATION PARTS					
Fee Transmittal Form (prescribed filing fee(s))				6. Assignment Papers				
2 Specification			7. Certified Copy of Priority Document(s) (if foreign priority is claimed)					
	X Abstra	ct of the Disclosure					·	
	X Tille of	the Invention	,	,			m in Microficho	
X Cross References to Related Applications (if applicable)			. 9. En	glish Translatio	on Document (if applica	ıbio)		
Statement Regarding Federally-sponsored Research/Development (if applicable)			10. Information Disclosure Copies of IDS Statement/PTO-1449 Citations					
2000	Reference to Microficho Appendix (if applicable)			11. Petition Checklist and Accompanying Potition				
	X Background of the Invention			12. Preliminary Amendment				
	X Brief Summary of the Invention X Brief Description of the Drawings (if drawings filed) X Detailed Description X Claim or Claims			13. Proprietary Information 14. X Return Receipt Postcard 15. X Small Entity Statement 16. Additional Enclosures (please identify below):				
·								
3.		ng(s) (whon nocossar C 113)	ry as proscribed by	· .			*te	
4.	X Execut	ed Declaration			SICNATURE O	EADDUCAN	IT, ATTORNEY, OR	AGENT
5.	Genetic Sequ	ence Submission all must be included)	· .			PAPPLICAN	11, 211010121, 011	AULIII
	Paper				Firm or Individual name	Dean P	. Edmundson	
		iter Readable Copy			Signature	Dean	P. Edmilar	
	Statement Verifying Identical Paper and Computer Readable Copy			Date. December 20, 2000				
_			FOR OFFIC	YAL I	ISE ONLY			
Appl	Application Number Class				· ·	Independent Claims		
Date	e of Receipt	Application Type		GAU	• .	•	Total Claims	
-				Filing License?		Drawing Sheets		
	Small Entity Foreign			Address?		Special Handling?		

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: V.V. ZHURIN & V.B. TIKHONOV

Serial No: (DOCKET 419-01)

Group No.:

FiledOn or about 12/20/2000

Examiner:

For: SYSTEM FOR THERMAL AND CATALYTIC CRACKING OF CRUDE OIL

Commissioner of Patents and Trademarks

Washington, D.C. 20231

EXPRESS MAIL CERTIFICATE

"Express Mail" label number <u>EF085111764US</u>

Date of Deposit <u>Dec. 20, 2000</u>

I hereby certify that the following attached paper or fee

Above-identified application for patent Declaration and Power of Attorney

7 sheets of drawings
Verified Statements of Small Entity Status
Transmittal letter
Filing fee

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Dean P. Edmundson

Dean A Edmilar

(Typed or printed name of person mailing paper or fee)

(Signature of person mailing paper or fee

NOTE: Each paper must have its own certificate and the "Express Mail" label number as a part thereof or attached thereto. When, as here, the certification is presented on a separate sheet, that sheet must (1) be algined and (2) fully identify and be securely attached to the paper or fee it accompanies. Identification should include the senal number and illing date of the application as well as the type of paper being filed, e.g. complete application, specification and drawings, responses to rejection or refusal, notice of appeal, etc. If the serial number of the application is not known, the identification should include at least the name of the inventor(s) and the title of the invention.

NOTE: The label number need not be placed on each page, it should, however, be placed on the lirst page of each separate document, such as, a new application, amendment, assignment, and transmittal letter for a fee, along with the certificate of mailing by "Express Mail," Although the label number may be on checks, such a practice is not required. In order not to delace formal drawings it is suggested that the label number be placed on the back of each formal drawing or the drawings be accompanied by a sat of informal drawings on which the label number is placed.

=					
U.S. Department of Commerce	Complete if Known				
n 0002/PTO U.S. Department of Confinence Rev. 6/95 Patent and Trademark Office	Application Number	`			
rd	Filing Date				
5 FEE TRANSMITTAL	First Named Inventor	Zhurin			
	Group Art Unit				
	Examiner Name				
TOTAL AMOUNT OF PAYMENT (\$) 795.00	Attorney Docket Number	419-01			

The Commissioner is hareby authorized to charge indicated (eas and credit any over payments (v) Cyposit Account Name Charge Any Additional CFR 1,1a at the Mailing of the Account Name CFR 1,1a at the Mailing of the Research Code (1) Code (1) Code (1) Code (1) Code (1) Code (1) Code (2) CFR 1,1a at the Mailing of the Research CFR 1,1a at the Mail	METHO	D OF PAYMENT (check one)	<u> </u>
Account Number Deposit Account Name Money Order Money Order Money Order Money Order Money Order Mone	indicated less and credit any over payments to:	1 - 1 - 2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
Account Name Charge Any Additional Charge the issue Fee Set or 3/ CFR 1.16 at the Mailing of the Notice of Advance, 37 CFR 1.16 at the Mailing of the Notice of Advance, 37 CFR 1.13 at the Mailing of the Notice of Advance, 37 CFR 1.16 at the Mailing of the Notice of Advance, 37 CFR 1.16 at the Mailing of the Notice of Advance, 37 CFR 1.17 to the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance of Advance, 37 CFR 1.18 at the Mailing of the Notice of Advance of Ad	Account	X Check	
Fee Required Under 37	Account	Money Order	
Table File	Fee Required Under 37 CFR 1.18 at the Mailing of the Notice of Allowance, 37 CFR	.]	
Largo Entity Small Entity Small Entity Fee F	FEE	CALCULATION (loos offoctive 1/1/96)	
Large Entity Small Entity Fee Fee Fee Fee Fee Fee Fee Fee Fee Fe	1 FILING FEE	3 ADDITIONAL FEES	
Code (f) Code (f) Code (f) Solution Fee Paid Code (f) Code	Large Entity Small Entity		
101 780 201 300 Utility illing 147 2,390 147 130 1,740 130 1,7	Foo Foo Foo Foo Poo Doscription Foo Paid	Coda (\$) Codo (\$)	
101 780 201 390 Utility lilling 106 300 206 150 Design filling fee 112 870 112 870 Requesting publication of SIR prior to Examiner action SUBTOTAL (1) (\$) 355 115 110 215 55 Extension for response within first month 116 380 216 190 Extension for response within first month 117 900 217 450 Extension for response within first month 118 1400 218 700 Extension for response within furth month 118 1400 218 700 Extension for response within furth month 118 1400 218 700 Extension for response within furth month 118 1400 218 700 Extension for response within furth month 1200 220 145 Filling a brief in support of an appeal 120 290 220 145 Filling a brief in support of an appeal 120 290 220 145 Filling a brief in support of an appeal 140 110 240 55 Petition to revive unavoidably abandoned application 141 1,250 241 625 Petition to revive unavoidably abandoned application 141 1,250 241 625 Petition to revive unavoidably abandoned application 143 420 243 210 Design issue fee 122 130 122 130 Petitions to the Commissioner 120 220 120 220 Submission of Information Disclosure Stret 120 230 240	355.		
100 300 206 150 Design filling fee 112 870 112 870 Requesting publication of SIR prior to Examiner action 108 700 208 300 Reissue filling fee 113 1,740 113 1,740 Requesting publication of SIR after Examiner action Examiner action Examiner action 115 110 215 55 Extension for response within first month 116 380 216 130 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 219 145 Notice of Appeal 145 Notice of Appeal 145 Notice of Appeal 145 Notice of Appeal 146 140 250 221 125 Request for oral hearing 128 1430 130 1,430 Petition to revive unavoidably abandoned application 141 1,250 241 625 Petition to revive unavoidably abandoned application 141 1,250 241 625 Petition to revive unintentionally 240	101 780 201 390 Utility Illing		•
113 1,740 113 1,740 Requesting publication of SIR after Examiner action Extension for response within first month 116 380 216 190 Extension for response within first month 117 900 217 450 Extension for response within first month 118 1,400 218 700 Extension for response within first month 118 1,400 218 700 Extension for response within first month 118 1,400 218 700 Extension for response within first month 119 290 219 145 Notice of Appeal 120 290 220 145 Filing a brief in support of an appeal 120 290 220 145 Filing a brief in support of an appeal 140 110 240 55 Petition to revive unavoidably abandoned application 141 1,250 241 625 Petition to revive unavoidably abandoned application 141 1,250 241 625 Petition to revive unavoidably abandoned application 142 1,280 242 640 Utility issue (ce (or reissue) 143 420 243 210 Design issue (ce 143 420 243 210 Design issue (ce 122 130 122 130 Partitions to the Commissioner 146 660 244 330 Plant issue (ce 122 130 122 130 Partitions to the Commissioner 146 660 244 330 Plant issue (ce 147 680 244 340 Plant issue (ce 148 680 244 330 Plant issue (ce 148 680 244 340 Plant issue (ce 148 680 244 34	7.00	112 870 112 870 Requesting publication of SIR prior to	
SUBTOTAL (1) (5) 355 115 110 215 55 Extension for response within list month 117 900 217 450 Extension for response within florth month 117 900 218 700 Extension for response within florth month 118 1400 218 700 Extension for response within florth month 118 1400 218 700 Extension for response within florth month 118 210 219	TOTAL STATE OF THE		-
SUBTOTAL (1) (\$) 355 115 110 215 55 Extension for response within first month 116 380 216 130 Extension for response within second month 117 900 217 430 Extension for response within second month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 119 290 220 145 Filling a brief in support of an appeal 120 290 220 145 Filling a brief in support of an appeal 140 110 240 55 Petition to institute a public use proceeding 140 110 240 55 Petition to revive unavoidably abandoned 240 241 250 250 250 250 250 250 250 250 250 250 250 250	108 780 208 390 Reissoe ming fee		
2 CLAIMS Fee from	CURTOTAL (1) (3) 355	to the tree and the	_
2 CLAIMS Fee from Delow Foe Paid 118 1,400 218 700 Extension for response within third month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within third month 118 1,400 218 700 Extension for response within third month 118 1,400 218 700 Extension for response within third month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 118 1,400 218 700 Extension for response within fourth month 120 145 Extension for response within fourth month 120 140	SOBIOTAL (1) (4) 333	to the contract of the contrac	-
CLAIMS		1117 900 217 450 Extension for response within third month	-
Total Claims	2 CLAIMS Fee from	118 1,400 218 700 Extension for response within fourth month	-
Total Claims 15 - 20 = 0	holow a a t		-
Independent Claims 14 - 3 = 11		1 1775	•
Independent Claims 14 - 3 = 11		138 1 430 138 1.430 Petition to institute a public use proceeding	
Claims Type Claims Multiple Dependent Claims O Multiple Dependent Claims O Large Entity Small Entity Fao Fao Foo Poscription Code (3) Code (3) 102 78 202 39 Independent claims in excess of 3 completed to any over original patent 109 78 209 39 Reissue independent claims in excess of 20 and over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent 141 1,250 241 625 Petition to revive unintentionally abandoned application 142 1,280 242 640 Utility issue fec for reissue) 143 420 243 210 Design issue fec for reissue) 144 660 244 330 Plant issue fec for reissue) 145 660 244 330 Plant issue fec for reissue) 146 660 244 330 Plant issue fec for reissue) 147 1,280 242 640 Utility issue fec for reissue) 148 1,280 242 640 Utility issue fec for reissue) 149 660 244 330 Plant issue fec for reissue) 140 660 244 330 Plant issue fec for reissue) 140 660 244 330 Plant issue fec for reissue) 141 1,250 241 625 Petition to revive unintentionally abandoned application 142 1,280 242 640 Utility issue fec for reissue) 143 420 243 210 Design issue fec for reissue) 144 660 244 330 Plant issue fec for reissue) 145 660 244 330 Plant issue fec for reissue) 146 660 244 330 Plant issue fec for reissue) 147 660 244 330 Plant issue fec for reissue) 148 660 244 330 Plant issue fec for reissue) 149 660 244 330 Plant issue fec for reissue) 140 660 244 330 Plant issue fec for reissue) 140 660 244 330 Plant issue fec for reissue) 140 660 244 330 Plant issue fec for reissue) 140 660 244 330 Plant issue fec for reissue) 140 660 244 330 Plant issue fec for reissue) 140 660 244 360 242 250 Submission of Information Disclosure Stmt 150 220 Submission of Information Disclosure Stmt 160 220 126 220 Submission of Information Disclosure Stmt 170 220 7 220 Protest after application published 170 220 7 1500 7 1500 Late Claim for priority during pendency 114 150 214 75 Provisional Application filing 160 250 250 250 250 250 250 250 250 250 25	1-4-4-4-440	140 110 240 55 Petition to revive unavoidably abandoned	•
Multiple Dependent Claims Multiple Dependent Claims O	Claims 14 - 3 = 11 X 40 = 110	1	•
Multiple Dependent Claims August	O initial in the second of the		,
Fac Fac Fac Fac Fac Fac Fac Description Code (5) Code (5) 102 78 202 39 Independent claims in excess of 3 103 22 203 11 Claims in excess of 20 104 250 204 125 Multiple dependent claims Over original patent 109 78 209 39 Reissue independent claims Over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent SUBTOTAL (3) (5) 0	0.	142 1 280 242 640 Utility issue (cc. (or reissue)	
Fac Fac Fac Fac Fac Fac Fac Description Code (5) Code (5) 102 78 202 39 Independent claims in excess of 3 103 22 203 11 Claims in excess of 20 104 250 204 125 Multiple dependent claims Over original patent 109 78 209 39 Reissue independent claims Over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent SUBTOTAL (3) (5) 0	Mulliple Dependent Claims 0 = 0	143 420 243 210 Design issue fee	,
Fac Fac Fac Fac Fac Fac Fac Description Code (5) Code (5) 102 78 202 39 Independent claims in excess of 3 103 22 203 11 Claims in excess of 20 104 250 204 125 Multiple dependent claims Over original patent 109 78 209 39 Reissue independent claims Over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent SUBTOTAL (3) (5) 0	many or open	144 660 244 330 Plant issue fee	•
Fac Fac Fac Fac Fac Fac Fac Description Code (5) Code (5) 102 78 202 39 Independent claims in excess of 3 103 22 203 11 Claims in excess of 20 104 250 204 125 Multiple dependent claims Over original patent 109 78 209 39 Reissue independent claims Over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent SUBTOTAL (3) (5) 0		122 130 122 130. Politions to the Commissioner	
Code (\$) Gode (\$) 102 78 202 39 Independent claims in excess of 3 103 22 203 11 Claims in excess of 20 104 250 204 125 Multiple dependent claim 109 78 209 39 Reissue independent claims over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent		126 220 126 220 Submission of information Disclosure Stift	
102 78 202 39 Independent claims in excess of 3 103 22 203 11 Claims in excess of 20 104 250 204 125 Multiple dependent claims 109 78 209 39 Reissue independent claims 109 22 210 11 Reissue claims in excess of 20 110 22 210 11 Reissue claims in excess of 20 110 20 210 11 Reissue claims in excess of 20 110 210 210 210 210 210 210 210 210 210	100		
cxcess of 3 103 22 203 11 Claims in excess of 20 104 250 204 125 Multiple dependent claims 109 78 209 39 Reissue independent claims 110 22 210 11 Reissue claims in excess of 20 and over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent	and the section of th		_
104 250 204 125 Multiple dependent claim : 114 150 214 75 Provisional Application filing 109 78 209 39 Reissue independent claims over original patent over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent Other (see (specify)	excess of 3		•
104 250 204 125 Multiple dependent claims 109 78 209 39 Reissue independent claims 110 22 210 11 Reissue claims in excess of 20 110 and over original patent 110 22 210 11 Reissue claims in excess of 20 110 214 75 Provisional Application filing Other (ce (specify) Other (ce (specify) SUBTOTAL (3) (5) 0	1100 22		•
over original patent 110 22 210 11 Reissue claims in excess of 20 and over original patent Other (se (specify)	104 250 204 125 Multiple dependent claim	114 150 214 75 Provisional Application filing	•
and over original patent Other Ice (specily)	over original patent	·	,
SUBTOTAL (2) (\$) 440 SUBTOTAL (3) (\$) 0		Other (se (specify)	
	SUBTOTAL (2) (\$) 440	SUBTOTAL (3) (\$) 0	

SUBMITTED BY						Complete (if a)	77
Typed or D	ean P. Edmundson	•	.!			Reg. Number	25723
	Dean P. Edmilins		,	Date	12/20/20	Seposit Account User ID	